

## WISCONSIN EPI EXPRESS

August 14, 2003

[Wisconsin Department of Health & Family Services](#)

Division of Public Health

Bureau of Communicable Diseases

"Surveillance provides information for action." [World Health Organization](#)

*The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. Herb Bostrom: [bostrhh@dhfs.state.wi.us](mailto:bostrhh@dhfs.state.wi.us)*

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### 1. Bioterrorism Preparedness Disease Surveillance Update

There are many things going on as part of Focus Area B (Epidemiology and Surveillance) of Wisconsin's CDC Public Health Preparedness Grant, including the following:

#### Syndromic Surveillance

A syndromic surveillance pilot study will soon begin with the Marshfield Clinic Medical Research Foundation. Using algorithms developed by the State of Minnesota and the Department of Defense's "Electronic Surveillance System for the Early Notification of Community-based Epidemics" (ESSENCE) syndrome definitions, Marshfield will analyze daily the clinic, hospital, and emergency visits throughout its system. Using the statistical and data analysis capabilities of the Epidemiology Research Center, both raw and analyzed data will be available for review. The baseline against which the trends will be measured will be four years of cumulative data from the Marshfield integrated clinical records system.

The pilot will enable syndromic surveillance using large amounts of data covering all types of health care visits, and where there are strong historical baseline data available. Many states, when beginning syndromic surveillance, are essentially trying to assess trends against a daily moving average rather than against a historic average. Wisconsin will be able to assess the usefulness of both approaches. We hope for data to start flowing in January 2004. In the intervening months, programmers will be working with the database in Marshfield, and we will be working on reports and data availability via the Wisconsin Health Alert Network (HAN).

#### Automated Electronic Laboratory Reporting

Also beginning is a pilot study of automated electronic laboratory reporting of laboratory-test-confirmed reportable conditions. The majority of our reportable conditions are able to be called "cases" on the basis of a positive laboratory test alone. In speaking with hospital infection control and local health department staffs, it became evident that a method to directly pull these

positive results into an electronic reporting system would save all a great deal of time, and speed reporting. However, we expect the number of cases to increase dramatically for some diseases. Trials of electronic reporting elsewhere have estimated that only between 5 and 10% of reportable conditions are actually reported using the current paper-based system. Thus, those who report diseases should be able to save time, but those who receive the reports may have more cases to follow.

The Marshfield Clinic Laboratory will work with the UW Department of Information Technology to send laboratory results directly to the data repository within the HAN. Bureau of Communicable Diseases staff will assist with coding and analyses. BCD staff is also working on mechanisms to alert local health departments to the reported cases of disease, and to manage the increase in identified cases. As there is extensive programming needed, we do not expect any daily data until January 2004. Even if successful, this pilot will not allow us to give up our usual reporting immediately, because the paper reports will be used to evaluate electronic reporting. In addition, a guide for hospital and laboratories who wish to consider automated reporting will be produced using our experience with the Marshfield Laboratory.

#### **Alternate Data Sources**

We are exploring several different data sources, which have been considered possible markers of outbreaks in syndromic surveillance studies.

- a) Information will be received within the next few weeks about free state access to a daily dataset of point-of-sale, over-the-counter medication sales. This dataset is a combination of data from several large retail chains, and is created and analyzed at the University of Pittsburgh under an agreement with the CDC.
- b) Nurse call line data will at some point be added to the Marshfield Syndromic Surveillance Pilot to assess whether calls may provide an earlier signal of outbreaks or events than clinic visits.
- c) Poison center calls are logged and data available every 24 hours in another program we are investigating. This dataset may provide information on chemical, food, and water problems.

Analysis of these data sources will initially be retrospective, to see if known outbreaks were preceded by changes in any of these signals.

#### **Epidemiologic Capacity at the Consortia Level**

While the collection of additional data holds the promise of improving disease surveillance, it will also place an additional burden on those state and local epidemiologists charged with analyzing the data. The primary goal of the CDC Bioterrorism Grant is to enhance public health infrastructure so that episodes of bioterrorism may be rapidly recognized, controlled, and prevented from spreading. To accomplish this, DPH believes that we need more epidemiologic capacity throughout the state. DPH has identified sufficient funding for each consortium to enhance epidemiologic capacity at their level. Suggested ways to do this are included in the information, which will shortly be given to all consortium fiscal agents and program coordinators, and the final document will be posted on the HAN

There will be much happening in public health epidemiology and surveillance in Wisconsin over the next year. We will keep you informed via this newsletter. Please address any questions to Herb Bostrom [bostrhh@dhfs.state.wi.us](mailto:bostrhh@dhfs.state.wi.us) or Lorna Will [willlr@dhfs.state.wi.us](mailto:willlr@dhfs.state.wi.us).

## **2. Teachers Invited to Compete for Awards in Young Epidemiology Scholars Program**

Deadline: October 15, 2003

The Young Epidemiology Scholars (YES) program, an initiative designed to encourage high school teachers to educate students about epidemiology, is accepting proposals for its second annual teacher competition. YES is sponsored by the Robert Wood Johnson Foundation (<http://www.rwjf.org/>) and administered by the College Board (<http://www.collegeboard.com/>).

The science of epidemiology explores patterns of disease, illness, and injury within populations, with the goal of developing methods for control and prevention to improve public health. Winning entries from the first YES teacher competition, held last year, included curricula addressing the transmission of HIV, the probability of diabetes occurring in certain populations, and social epidemics such as poverty, drug abuse, and illiteracy. Each year, the YES program will post winning entries on its Web site so that other teachers may use the curricula to educate their students.

The competition is open to individual teachers and teams of teachers. However, each entry is eligible for only one prize, to be shared among all team members. Up to eighteen projects will be selected as regional winners, with a \$5,000 award for each. Of these, up to six projects will be selected as national winners, with each receiving an additional \$15,000 award.

The registration form and further details are available at the College Board Web site.

RFP Link: <http://www.collegeboard.com/yes>

## **3. Important New HIV Prevention Resources Published By the CDC**

### ***Incorporating HIV Prevention into the Medical Care of Persons Living with HIV***

The Centers for Disease Control and Prevention (CDC), in cooperation with the federal Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Disease Society of America, recently published recommendations on integrating HIV prevention in the medical care of persons with HIV infection. These recommendations were published as a Recommendation and Reports edition of the Morbidity and Mortality Weekly Report (MMWR), Volume 552, No. RR-12, dated July 18, 2003. The recommendations are general and apply to incorporating HIV prevention into the medical care of all HIV-infected adolescents and adults, regardless of age, sex, or race/ethnicity. They are intended for all persons who provide medical care (e.g., physicians, nurse practitioners, nurses, physician assistants) and can be useful to others who deliver prevention messages (e.g., case managers, social workers, health educators).

The recommendations are categorized into three major components: 1) screening for HIV transmission risk behaviors and STDs, 2) providing brief behavioral risk-reduction interventions in the office setting and referring selected patients for additional prevention interventions and other related services, and 3) facilitating notification and counseling of sex and needle-sharing partners of infected persons. The recommendations can be view and downloaded via the Internet through the CDC website at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5212a1.htm>

#### **4. Advancing HIV Prevention: Interim Technical Guidance for Selected Interventions**

This new 81-page document published by the CDC on July 31, 2003 is a companion resource that supports the new CDC initiative, *Advancing HIV Prevention: New Strategies of a Changing Epidemic* (MMWR April 18, 2003; 52:329-3567). CDC's prevention activities over the past two decades have focused on helping uninfected persons at high-risk for acquiring HIV change and maintain behaviors to keep them uninfected. The CDC recognizes that the next decade promises new hope as three primary areas of HIV prevention are emphasized: 1) early detection of persons who are HIV positive and referral to treatment and care services, 2) prevention for persons living with HIV, and 3) prevention for persons who are at high risk for HIV infection.

This new HIV prevention initiative emphasizes the need for HIV testing and prevention efforts, in both clinical and non-clinical settings, to increase the number of infected persons who know their status and who are receiving treatment and prevention services as soon as possible. As one of the first steps of the new initiative, CDC has drafted interim technical guidance to assist in implementing select HIV prevention activities, especially those undertaken by grantees funded with CDC HIV prevention funds. The guidance is especially relevant for local health departments and outlines the following seven activities that pertain to the new CDC prevention initiative.

- routinely recommended HIV testing as a part of regular medical care
- rapid testing in non-clinical settings
- routine voluntary HIV testing of inmates in correctional facilities
- HIV partner counseling and referral services
- risk reduction for persons living with HIV
- prevention in medical care settings
- achieving universal HIV testing of pregnant women

The new technical assistance guidance can be viewed and downloaded from the CDC website at: <http://www.cdc.gov/hiv/partners/AHP/InterimGuidancefinal.pdf>.

#### **5. Statewide SARS Teleconferences**

Two statewide SARS preparedness teleconferences--each with a slightly different focus-- will be presented in October. On October 8 from 1:00-2:30 PM a session will be held for hospital personnel, and on October 9 from 1:00-2:30 a session will be held for local health department personnel. Prior to the sessions, a Power Point presentation for use during the session, along with handouts and dial-up instructions will be distributed to the teleconference site contacts. Conference notices with further details will be widely distributed in early September, and anyone interested in participating in either session should hold the respective date open.

#### **6. Revised Recommendations against the Use of Rifampin and Pyrazinamide for Latent Tuberculosis Infection**

The August 8, 2003 issue of *Morbidity and Mortality Weekly Report* (MMWR) contains revised recommendations against the use of the 2-month rifampin and pyrazinamide regimen for treatment of latent TB infection (LTBI). The article recommends that the 2-month regimen should generally not be offered.

The 2-month regimen of rifampin plus pyrazinamide (2RZ) was shown in clinical trials with HIV-infected persons to be a safe and effective alternative to a 9-month regimen of isoniazid (INH) for the treatment of latent TB infection. This regimen was recommended in April 2000 by both the American Thoracic Society (ATS) and the Centers for Disease Control (CDC). However, in October 2000, CDC received a report of a patient who died while receiving this regimen. CDC initiated surveillance for other such adverse events and began a study to estimate their frequency.

From October 2000 to June 2003, a total of 48 cases of confirmed 2RZ-associated severe liver injury were reported including 11 deaths. Additional data from patients receiving 2RZ for the treatment of LTBI during January 2000 - June 2002 demonstrated high rates of hospitalization and death from liver injury associated with the regimen.

Surveillance data, survey results, and published studies of 2RZ-associated liver injury and hospitalization was presented to experts of the American Thoracic Society (ATS), Infectious Diseases Society of America, the American College of Chest Physicians, and the Food and Drug Administration. The ATS and CDC revised their original recommendation to advise that the 2RZ regimen should generally not be offered.

If the potential benefits of this regimen outweigh the risk for severe liver injury and death associated with it, use of 2RZ may be considered in carefully selected patients, but only if 1) the preferred regimens (9 months of INH, 6 months of INH, or 4 months of Rifampin) are judged not likely to be completed, and 2) oversight by a clinician with expertise in the treatment of LTBI can be provided. Consult the TB Program (608-266-9692) for more information before recommending this regimen.

Copies of the CDC report may be viewed on the Internet at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5231a4.htm>

## 7. Getting Patients to Complete Treatment for Latent TB Infection

Although CDC is recommending against the use of the 2-month rifampin and pyrazinamide regimen for treatment of latent tuberculosis infection (see related article), CDC and the Wisconsin TB Program continue to strongly support the treatment of LTBI in the effort to eliminate tuberculosis.

Wisconsin data for patients who begin treatment for latent tuberculosis infection (LTBI) with state-provided medication indicates a therapy completion rate below the 75% target (range 64%-68%). Nine months of isoniazid (given daily or twice-weekly using directly observed therapy-DOT) is the preferred regimen, however there are alternatives. Six months of isoniazid may be given daily or twice weekly (by DOT) to HIV-negative persons. Four months of rifampin may be given daily to HIV-negative or HIV-positive persons.

When reporting the outcome of a patient receiving treatment for latent TB infection, include the **number of months completed** even if the patient did not finish the entire prescribed regimen. Documenting the **number of doses** taken will help determine if the patient has completed an adequate alternative regimen. A 9-month regimen taken daily requires 270 doses, taken twice-weekly (by DOT) requires 76 doses. A 6-month daily regimen requires 180 doses and a twice-weekly DOT regimen requires 52 doses. A 4-month regimen of rifampin taken daily requires 120 doses.

Develop an individualized approach to each patient's care including directly observed therapy, education, incentives, enablers, and other adherence mechanisms. Additional information on promoting treatment adherence can be found in the TB Program document "Ensuring Treatment Adherence and Completion and Providing Directly Observed Therapy-DOT" available on the TB Program website at

[http://www.dhfs.state.wi.us/dph\\_bcd/TB/Resources/guidelines/guideline.htm](http://www.dhfs.state.wi.us/dph_bcd/TB/Resources/guidelines/guideline.htm)

## **8. Reminder – Wisconsin Viral Hepatitis Conference**

The first statewide conference on viral hepatitis, jointly sponsored by the Wisconsin Department of Health and Family Services and the UW Medical School Office of Continuing Medical Education, will be held on Friday, September 5<sup>th</sup> at the Monona Terrace Community and Convention Center in Madison. The conference is intended for health care providers including local health departments, primary care physicians, infection control practitioners, nurse practitioners and physician assistants who participate in the care of patients with hepatitis. A pdf file of the conference brochure is attached below, and can be printed out and used to register for the conference. For more information about this conference, please contact Cathy Means at 608-263-6637 or [cjmeans@wisc.edu](mailto:cjmeans@wisc.edu).



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### **Telephone Reporting of Unusual Disease Occurrences**

*Occurrences of diseases that are uncommon or atypical in Wisconsin, and outbreaks or clusters of disease which are identified, should be reported by phone as soon as possible, to (608) 258-0099. Reports may be made to this number on a 24/7 basis, but please do not use it for normal and routine disease reporting*

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